

New plan seeks to turn chicken manure to energy



Timothy B. Wheeler, The Baltimore Sun Updated March 22, 2015

A New Hampshire-based company has teamed with poultry giant Perdue to propose a \$200 million plant on the Eastern Shore to extract energy from chicken manure, offering its plan as a viable remedy for the farm pollution fouling the Chesapeake Bay.

Officials with AgEnergyUSA met in Annapolis last week with lawmakers, state officials, environmentalists and farmers, seeking support and legislation worth tens of millions of dollars for their project.

While some remain wary because little has come of previous plans for dealing with the Shore's poultry pollution, this one comes from a company with prominent partners. And it is already building a manure-to-energy facility in Colorado.

"We think we have a very manageable solution, with our partner Perdue," said James Potter, AgEnergyUSA's president.

The company's other partner is EDF Renewable Energy, an arm of the French power company.

The push for the new manure-to-energy project came as the Hogan administration and leading Democrats settled their differences over regulations to curb farmers' use of polluting poultry waste to fertilize their crops. Environmentalists had long pushed for strict limits to keep the manure from washing off fields into the bay. But farmers resisted, arguing

that the costs of disposing of the manure and buying other fertilizer would drive them out of business.

"The timing is perfect," said Potter of his proposal to turn the manure into energy. "This allows the Eastern Shore to put together a plan for meeting [manure-limiting regulations] without disrupting the economy."

This isn't Potter's first try at a manure-to-energy plant on the Shore. Also in partnership with Perdue, he made an unsuccessful bid for a contract to have the state buy electricity from a manure-burning power plant he would have built. The pair lost to a California company, whose project they are now trying to edge out.

This time, Potter's company wants to build an "anaerobic digestion" plant near Salisbury that could handle up to 200,000 tons of chicken litter a year — close to what officials estimate is the excess amount being spread on the Shore each year. Environmentalists like this process better than burning manure, which they contend raises risks of air pollution.

The plant would use bacteria to extract methane-rich bio-gas for industrial use. The residue would be processed so that the bay-fouling nutrients in chicken waste could be separated and used in a more environmentally friendly manner. The nitrogen could be sold back to farmers as liquid fertilizer, which crops need every year, while the problematic phosphorus that's built up in Shore soils could be shipped elsewhere and sold as peat moss, Potter explained.

With EDF, Potter's company is building a \$100 million digestion facility to process cattle manure in Colorado. EDF also is a partner on the Maryland project, according to material presented to lawmakers in Annapolis. EDF officials did not respond to a request for comment.

Perdue Farms Inc. acknowledged that it has signed a letter of intent to work with AgEnergyUSA. The Salisbury-based poultry company pledged to furnish chicken litter as well as organic wastes from its processing plants for use in the digestion process. And the company retains the option to market the fertilizer byproducts.

"Environmentally, this project will provide an alternative to land application for a significant amount of poultry litter, eliminating the risk of any portion of the nitrogen or

phosphorous in this litter from finding its way into the Chesapeake Bay watershed," said Steve Schwalb, Perdue's vice president for environmental sustainability.

Environmentalists briefed on the project say they like that it would take several times as much phosphorus off the Shore as is needed to meet bay cleanup targets.

"It's the most promising thing we've seen," said Doug Myers, senior scientist for the Chesapeake Bay Foundation.

With Perdue involved, farm groups also sound cautiously hopeful.

"It looks like it might be a major player," said Valerie T. Connelly, executive director of the Maryland Farm Bureau, who said she was present Friday when Potter briefed Eastern Shore legislators on the project.

Lawmakers say they're inclined to be supportive, but want more details.

"There is a real urgency there now," said Sen. Thomas M. Middleton, a Charles County Democrat and chairman of the Finance Committee. A farmer himself, Middleton said he's excited by the prospect of being able to resolve the dilemma of how to wean farmers from relying on manure as fertilizer for their crops.

Middleton's support is key, as his committee is weighing a proposal Potter says is critical to the feasibility of the project.

The General Assembly already was mulling legislation to create lucrative "thermal energy credits," which generators of steam or heat could sell to power companies to meet Maryland's renewable energy mandates. AgEnergyUSA and its partners want to enlarge that pool of credits to ensure there are plenty for their project, enough to yield perhaps \$30 million.

Middleton said he's not ready to proceed until he has more financial information on the project, and how vital the credits are.

"I don't want this whole thing to be another giveaway," he said.

Middleton and others are still shaking their heads over the lack of progress by the earlier manure-to-energy project. The state agreed in 2013 to buy electricity from a \$75 million poultry-manure-burning power plant to be built by Green Planet Power Solutions of

California, a company that has never built such a facility. With just two years to go before it must begin generating power, the company has yet to apply for any permits from the Maryland Department of the Environment. Middleton said he's convinced it can't meet the deadline and has asked the attorney general's office for an opinion on whether the contract can be nullified.

Coleman R. Cassel II, the California company's CEO, said in an email last week that he is "moving forward" on the project, but is seeking an extension of the contract. He has been held up, he said, by inability to nail down an agreement to sell power from the plant to the University System of Maryland. He said he's also been unable to get a written agreement guaranteeing his project would get a lucrative subsidy from funds that Exelon had pledged to the state to build a poultry-litter-fueled power plant.

Abigail Ross Hopper, who was Gov. Martin O'Malley's energy adviser, said the administration had agreed to that subsidy, estimated to be worth more \$30 million. But Hopper left the O'Malley administration to become head of the federal Bureau of Ocean Energy Management before the deal was finalized, she said, and she doesn't know what happened to it.

AgEnergyUSA's Potter argued that his project deserves the Exelon money.

"It's important that the state realign ... those monies to viable projects," he said.

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